

REMARKS

This Response is submitted in reply to the Non-Final Office Action of December 20, 2005. Claims 1-29 are pending in the present application. By the present amendment, Claims 1, 7-9 and 25 are amended and Claims 30-31 are added. No new matter is introduced by any of these amendments and support is provided at least by paragraphs 181-182 of the originally filed specification. A petition for a three month extension of time is submitted herewith. Please charge Deposit Account No. 02-1818 for any fees which are due and owing or to credit any overpayment.

Rejections Under 35 U.S.C. §102(b)

Claims 1-2, 4-6, 11-12 and 15-17 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,851,003 to Lindstrom ("Lindstrom"). The Action states that Lindstrom teaches a method as recited in these claims.

Applicant submits that Claim 1 recites features not disclosed or suggested by the cited prior art. Specifically, Claim 1 is directed to, among other things, a method of treatment of refractive error in the eye, including the steps of separating a first surface of the first corneal layer from a second surface of the second corneal layer, forming a flap and exposing the second surface at an area that intersects the main optical axis and coating a surface of the inlay with a compound (before or after implanting the inlay), wherein the compound is an adhesive that adheres the inlay to the cornea at the area that intersects the main optical axis.

Lindstrom discloses implanting an intracorneal lens 10 in the corneal stroma of the eye. The intracorneal lens 10 has a basement coating membrane material 22 which provides for growth of the

epithelium over the anterior surface 18 of the lens optic 12. However, it is respectfully submitted that the coating of Lindstrom is not an adhesive. Adhesion is more advantageous than bonding though cellular growth for applications in which rapidly fixing the lens in place is desirable, such as outpatient ophthalmology procedures.

Lindstrom discloses the use of an adhesive only around the periphery of the lens, but it is respectfully submitted that Lindstrom does not disclose or suggest coating a surface of the inlay with a compound, wherein the compound is an adhesive that adheres the inlay to the cornea at the area that intersects the main optical axis. Applicant respectfully submits that having the adhesive coating at the optical axis of the eye is an improvement over having the adhesive only at the periphery as disclosed by Lindstrom because it reduces the likelihood of the formation of unwanted pockets, it increases the integrity of the adhesive coating, and it strengthens the adhesion between the cornea and the inlay. Thus, the present invention reduces the likelihood of follow procedures to correct these potential problems.

For at least these reasons, Applicant respectfully submits that Claim 1 and Claims 2-24 and 30, which depend from Claim 1, are each patentably distinguished over Lindstrom and are in condition for allowance.

Rejections Under 35 U.S.C. §103(a)

Claims 1, 3, 8-9, 19-26 and 28-29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lindstrom in combination with U.S. Patent No. 4,842,599 to Bronstein ("Bronstein") and U.S. Patent No. 5,713,957 to Steele et al. ("Steele"). The Action states that the combination of these three references renders these claims obvious.

Applicant respectfully submits that the Bronstein and Steele patents do not overcome the deficiencies of the Lindstrom patent. Specifically neither reference discloses or suggests coating a surface of the inlay with a compound, wherein the compound is an adhesive that adheres the inlay to the cornea at the area that intersects the main optical axis.

The Bronstein patent discloses a prosthetic cornea that replaces a cylindrical plug or portion of the cornea. Similar to Lindstrom, Bronstein discloses the use of an adhesive only around the periphery of the lens, but it is respectfully submitted that Bronstein does not disclose or suggest coating a surface of the inlay with a compound, wherein the compound is an adhesive that adheres the inlay to the cornea at the area that intersects the main optical axis.

Steele discloses coating a lens with a material that promotes bonding by encouraging cellular growth or by encouraging cells to modify their exteriors to bond better with themselves and the material. However, it is respectfully submitted that the material of Steele, which merely encourages growth or alteration of cells, is not an adhesive. For at least these reasons, it is respectfully submitted that Steele does not disclose or suggest coating a surface of the inlay with a compound, wherein the compound is an adhesive that adheres the inlay to the cornea at the area that intersects the main optical axis.

For at least these reasons, Applicant respectfully submits that Claim 1 and Claims 2-24 and 30, which depend from Claim 1, are each patentably distinguished over Lindstrom in view of Bronstein in further view of Steele and are in condition for allowance. For similar reasons, Applicant respectfully submits that Claim 25 and Claims 26-29 and 31, which depend from Claim 25, are each patentably distinguished over Lindstrom in view of Bronstein in further view of Steele and are in condition for allowance.

Claims 7, 10 and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Lindstrom patent in combination with the Bronstein and Steele patents and further in combination with U.S. Patent No. 5,332,802 to Kelman et al. ("Kelman"). The Action states that the combination of these references renders the above claims obvious.

Kelman discloses the production of a chemically modified, crosslinkable, telopeptide-containing, naturally crosslinked, solubilized collagen from tissue obtained from a human donor. However, it is respectfully submitted that Kelman does not disclose or suggest an adhesive. Kelman discloses cross-linking collagen using UV light to form an implant in situ. However, the collagen of Kelman is not an adhesive and it is not in any way adhering anything together. Therefore, it is further respectfully submitted that Kelman does not disclose or suggest coating a surface of the inlay with a compound, wherein the compound is an adhesive that adheres the inlay to the cornea at the area that intersects the main optical axis.

For at least these reasons, Applicant respectfully submits that Claims 7, 10 and 27 are each patentably distinguished over Lindstrom in view of Bronstein in further view of Steele in still further view of Kelman and are in condition for allowance.

Claim 14 is rejected under 35 U.S.C. §103(a) as being unpatentable over the Lindstrom patent in combination with the Bronstein and Steele patents and further in combination with U.S. Patent No. 5,964,748 to Peyman ("Peyman '748"). The Action states that the combination of these references renders the above claim obvious.

Peyman '748 discloses modifying the cornea using ablation and/or insertion of ocular material in the cornea. However, Applicant respectfully submits that Peyman '748 does not disclose or suggest adhesive. Therefore, it is respectfully submitted that Peyman '748 does not

disclose or suggest coating a surface of the inlay with a compound, wherein the compound is an adhesive that adheres the inlay to the cornea at the area that intersects the main optical axis.

For at least these reasons, Applicant respectfully submits that Claim 14 is patentably distinguished over Lindstrom in view of Bronstein in further view of Steele in still further view of Peyman '748 and is in condition for allowance.

Claims 13 and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over the Lindstrom patent in combination with the Bronstein and Steele patents and further in combination with U.S. Patent No. 5,919,185 to Peyman ("Peyman '185"). The Action states that the combination of these references renders the above claim obvious.

Peyman '185 discloses directing a laser beam onto certain portions of a blank, so that the laser beam ablates those portions and thus reshapes the blank. However, Applicant respectfully submits that Peyman '185 does not disclose or suggest adhesive. Therefore, it is respectfully submitted that Peyman '185 does not disclose or suggest coating a surface of the inlay with a compound, wherein the compound is an adhesive that adheres the inlay to the cornea at the area that intersects the main optical axis.

For at least these reasons, Applicant respectfully submits that Claims 13 and 18 are each patentably distinguished over Lindstrom in view of Bronstein in further view of Steele in still further view of Peyman '185 and are in condition for allowance.

New Claims 30 and 31

Applicant further respectfully submits that none of the cited references disclose or suggest that the compound adheres the inlay to the cornea at the area that intersects the main

optical axis, immobilizing the inlay relative to the area in not more than approximately five minutes. Even if the collagen of Kelman were mistakenly interpreted to be adhesive, the shortest UV exposure time taught by Kelman to cross-link the collagen is twenty minutes.

For at least these reasons, it is respectfully submitted that Claims 30 and 31 are each patentably distinguished in view of the cited references, alone or in combination, and are in condition for allowance.

An earnest endeavor has been made to place this application in condition for formal allowance and is courteously solicited. If the Examiner has any questions regarding this Response, Applicants respectfully request that the Examiner contact the undersigned.

Respectfully submitted,

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